

~~a cannula having an elongate cannula body, the body including medial and distal portions thereof having a first diameter and a proximal portion thereof having a second diameter to the medial portion and having a second diameter being larger than the first diameter~~

a trocar having an elongate trocar body for extending through the cannula, the elongate trocar body having a sharpened distal end portion, a medial portion⁵² thereof having a first diameter, and a proximal portion¹³⁶ having a second diameter, the second diameter being larger³⁸ than the first diameter, the trocar also having a handle connected to a proximal end portion of the trocar body for gripping of and handling of the trocar by a hand of a user and a shield³⁴ slidably mounted to the medial portion of the trocar body and biased in an extended position so that a distal end of the shield coveringly protects the sharpened distal end of the trocar body until pressure is applied thereagainst so that the shield slidably moves toward the proximal portion of the trocar body in a retracted position, the shield having a third diameter, the third diameter being (at least) equal to or less than the second diameter.

2. A trocar system as defined in Claim 1, wherein the shield has a tubular-shaped shield body that substantially surrounds the medial portion of the trocar body and biasing means positioned between an outer
5 surface of the medial portion of the trocar body and an
inner surface of the tubular-shaped shield body.

Sub B3

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explain

3. A trocar system as defined in Claim 2, wherein the trocar body includes a trocar body transition region, the transition region having an outer surface extending outwardly from the medial portion to the proximal portion and defining a shield stop when the shield is biased to the retracted position.

4. A trocar system as defined in Claim 3, wherein the shield stop comprises a first shield stop, and wherein a second shield stop is connected to the trocar body and cooperates with the shield body to provide an alternative or an auxiliary stop for the shield body when moving to the retracted position.

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explain

5. A trocar system as defined in Claim 3, wherein the sharpened distal end portion has a fourth diameter, the fourth diameter being larger than the first diameter of the medial portion of the trocar body.

6. A trocar system as defined in Claim 5, wherein the shield body has a distal end which extends beyond a distal end of the sharpened distal end portion of the trocar body.

Sub B4

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7. A trocar comprising:
an elongate trocar body for extending through the cannula, the elongate trocar body having a sharpened distal end portion, a medial portion thereof having a first diameter, and a proximal portion having a second diameter, the second diameter being larger than the first diameter;

a handle connected to a proximal end portion of the trocar body for gripping of and handling of the trocar by a hand of a user; and

a shield slidably mounted to the medial portion of the trocar body and biased in an extended position so

that a distal end of the shield coveringly protects the sharpened distal end of the trocar body until pressure is applied thereagainst so that the shield slidably moves toward the proximal portion of the trocar body in a retracted position, the shield having a third diameter, the third diameter being at least equal to or less than the second diameter.

8. A trocar as defined in Claim 7, wherein the shield has a tubular-shaped shield body that substantially surrounds the medial portion of the trocar body and biasing means positioned between an outer surface of the medial portion of the trocar body and an inner surface of the tubular-shaped shield body.

9. A trocar as defined in Claim 8, wherein the trocar body includes a trocar body transition region, the transition region having an outer surface extending outwardly from the medial portion to the proximal portion and defining a shield stop when the shield is biased to the retracted position.

10. A trocar as defined in Claim 9, wherein the shield stop comprises a first shield stop, and wherein a second shield stop is connected to the trocar body and cooperates with the shield body to provide an alternative or an auxiliary stop for the shield body when moving to the retracted position.

11. A trocar as defined in Claim 10, wherein the sharpened distal end portion has a fourth diameter, the fourth diameter being larger than the first diameter of the medial portion of the trocar body.

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